

## **REMARKS / ARGUMENTS**

### **I. General Remarks**

Please consider the application in view of the following remarks. Applicants thank the Examiner for his careful consideration of this application.

### **II. Disposition of Claims**

Claims 15-18, 20-23, 28-30, 47-50, and 55-67 are pending in this application. Claims 1-14, 19, 32-46, and 69-81 were cancelled in a previous response. Claims 24-27, 31, 51-54, and 68 have been withdrawn.

The Office Action indicates that claims 23 and 50 were withdrawn as being drawn to a non-elected species based on Applicants' prior election of poly(orthoesters) as the species for the degradable material for purposes of examination. In this response, Applicants have amended claims 23 and 50 to recite that the degradable material "further" comprises a plasticizer, to clarify that these claims may read on the elected species. Thus Applicants respectfully request that claims 23 and 50 be considered with the remaining claims in the application.

Claims 23, 50, and 83 have been amended herein. These amendments are supported by the specification as filed.

Claim 83 stands rejected under 35 U.S.C. § 112, second paragraph. Claims 15-18, 20-22, 28-30, 47-49, 55-67, 82, and 83 stand rejected under 35 U.S.C. § 102(b). Claims 15-18, 20-22, 28-30, 47-49, 55-67, 82, and 83 stand rejected under 35 U.S.C. § 103(a).

### **III. Remarks Regarding Rejections of Claims**

#### **A. Rejection of Claim Under § 112**

Claim 83 stands rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention. With respect to this rejection, the Office Action states:

The claim is indefinite because the preamble recites the claim depending from "[t]he method of claim 47". Independent claim 47 is drawn to a well drill-in and servicing fluid and there is no method step recited in this independent claim. It is unclear as to whether Applicant intended the rejected claim to depend from the fluid of claim 47 or, alternatively, from one of the method claims.

(Office Action at 3.) In this response, Applicants have amended claim 83 to replace “method” with “well drill-in and servicing fluid”, as claim 47 recites. Thus, Applicants respectfully request withdrawal of this rejection.

**B. Rejections of Claims Under § 102(b)**

Claims 15-18, 20-22, 28-30, 47-49, 55-67, 82, and 83 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,783,527 to Dobson *et al.* (“Dobson”). With respect to these rejections, the Office Action states:

The following rejection addresses nonelected species and generic claims not limited to the elected species.

Dobson '527 discloses an alkaline water-based well fluid that deposits an easily degradable and easily removable filter cake on the sides of a borehole during an oilfield drilling operation, wherein the *fluid contains one or more polysaccharide polymers*, sized bridging particles, and a peroxide selected from alkaline earth metal peroxides, zinc peroxide, and mixtures thereof, and wherein the deposited filter cake contains peroxide. (Abstract) During use of the fluid in a drilling operation, *the peroxide is incorporated within the filter cake as an integral component thereof wherein subsequent contacting of the filter cake with an acidic solution activates the peroxide such that polymers within the filter cake are degraded, and wherein said polymer can be a polysaccharide.* (Col. 2, lines 36-64; col. 2, line 65 to col. 3, line 17)

Dobson '527 further discloses that the drilling fluid composition preferably contains bridging agents, such as sized calcium carbonate; wherein the polysaccharide can be a biopolymer (such as guar gum or xanthan), a starch derivative and/or a cellulose derivative (which are, of course, also viscosifiers); and wherein the liquid can be brine, such as an inorganic salt. (Col. 3, line 46 to col. 4, line 14; col. 5, line 51 to col. 6, line 43; col. 7, lines 37-44) The sized bridging particles can be up to 44 microns. (Example formulation/method on col. 9)

Dobson '527 disclose that a preferred embodiment for the drilling fluid contains one or more polysaccharide polymers, sized bridging particles, weighting particles, peroxide, and preferably sodium thiosulfate as required for stability against free radicals at elevated temperatures; wherein drilling of a hydrocarbon-containing formation with this fluid will place a filter cake on the sides of the borehole containing the polysaccharide polymers, peroxide, and bridging particles; and wherein upon completion of the drilling operation, the filter cake is removed from the sides of the borehole. (Col. 10, line 32 to col. 11, line 23)

Thus, the instant claims are anticipated by Dobson '527.  
(Office Action at pages 4-5 (emphasis added).) Applicants respectfully disagree with these rejections.

In order to form a basis for a rejection under § 102(b), a prior art reference must disclose each element of the rejected claim. MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2131 (2008). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Id.* (citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). Applicants respectfully submit that the polysaccharide polymers on which the Office Action appears to rely (as in the portions of the Office Action emphasized above) do not constitute “degradable materials”. In contrast to the degradable bridging agents (solids) of Applicants’ claims, the polysaccharides disclosed in *Dobson* comprise water soluble polymers that are used to viscosify a treatment fluid. (See *Dobson* at col. 1, ll. 34-38 & col. 3, l. 62 - col. 4, l. 14.) The bridging agents of *Dobson* are comprised of different materials entirely, such as calcium carbonate. (See *id.* at col. 6, ll. 19-29.) Nor do the filter cakes in *Dobson* “self-degrade”, as recited in independent claim 15. As the Office Action itself acknowledges, *Dobson* discloses adding a peroxide into the mixture that may interact with an acidic solution to produce free hydrogen peroxide, which subsequently removes the filter cake. (See Office Action at 4; *Dobson* at col. 4, ll. 15-26.) This use of an external degradation agent runs counter to the use of an inherently “degradable material” as described and claimed by Applicants, and certainly does not disclose allowing the filter cake to “self-degrade”.

Therefore, because *Dobson* does not disclose these elements recited in claims 15 and 47, *Dobson* cannot anticipate these claims, and claims 15 and 47 are allowable over *Dobson*. Moreover, since “a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers,” and since claims 16-18, 20-22, 28-30, 48, 49, 55-67, 82, and 83 depend, either directly or indirectly, from independent claim 15 or 47, these dependent claims are allowable for at least the same reasons. See 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request the withdrawal of these rejections.

**C. Rejections of Claims Under § 103(a)**

Claims 15-18, 20-22, 28-30, 47-49, 55-67, 82, and 83 stand rejected under § 103(a) as being unpatentable over *Dobson* in view of U.S. Patent No. 7,080,688 to Todd *et al.* (“*Todd*”). With respect to these rejections, the Office Action states:

This rejection is to address Applicant's elected species discussed above.

Dobson '527 was discussed above. Although Dobson '527 discloses the fluid composition to contain degradable material/polymers, it does not expressly disclose the degradable polymer to be an orthoester or a poly(orthoester), which are acid-releasing ethers.

However, Todd '688 teaches a method for treating a subterranean formation, such as degrading a filter cake deposited on a subterranean formation, wherein the method comprises providing particulates coated with an acid-releasing degradable material; placing the particulates into the formation so they form a pack adjacent to a filter cake; allowing said acid-releasing degradable material to produce acid to, thereby, degrade an acid-soluble filter cake; and removing said filter cake material from the formation. (Abstract; col. 3, lines 9-37) The particulates coated with the acid-releasing degradable material releases acid over a desired period of time (delayed rate of release) to dissolve the acid-soluble filter cake. (Col. 4, lines 3-45)

Todd '688 further discloses substantially water-insoluble compounds/polymers as preferred acid-releasing degradable materials that release acid over a sustained period of time, such as water-insoluble esters including orthoesters, poly(orthoesters), lactides and glycolide. (Col. 3, lines 39-47) The coated particles can be present in an amount of 0.1 to 20% by composition weight. (Col 4, lines 57-65)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time that the claimed invention was made to choose orthoester or poly(orthoester) as the delayed acid-releasing component/degradable material in Dobson'527. It would have been obvious to one skilled in the art to do so to attain a resultant subterranean formation treatment composition additive that provides a more efficient process for degrading a filter cake due by having the ability to manipulate the release time of the acid that degrades the filter cake as taught by Todd '688.

Thus, the claims are unpatentable over Dobson '527 and Todd '688.

(Office Action at page 5-6.)

Since *Todd* was published after the filing date of the present application, it is only available as prior art under § 102(e). Section 103(c) provides that “[s]ubject matter developed by another person, which qualifies as prior art only under [§ 102(e)] shall not preclude patentability under [§ 103(a)] where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the

same person.” 35 U.S.C. § 103(c). The present application and *Todd* were, at the time the invention of present application was made, both owned by Halliburton Energy Services, Inc. As the present application was filed on or after November 29, 1999, Applicant’s statement of common ownership at the time the invention of the present application was made is sufficient to remove prior art from the purview of § 103(a) since that prior art would have been prior art only under § 102(e). *See* MPEP § 706.02(l)(2). Accordingly, *Todd* is no longer available as prior art under § 103(a) in accordance with § 103(c), and thus Applicants respectfully request withdrawal of these rejections.

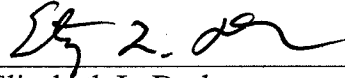
**SUMMARY AND PETITION FOR A ONE-MONTH EXTENSION OF TIME  
TO FILE THIS RESPONSE**

In light of the above remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicants hereby petition under the provisions of 37 C.F.R. § 1.136(a) for a one-month extension of time to file this Response, extending the period for reply from October 22, 2009 to November 22, 2009.

The Commissioner is hereby authorized to debit the Deposit Account of Baker Botts L.L.P. Deposit Account No. 02-0383, Order Number 063718.0187, in the amount of \$130.00 for the fee under 37 C.F.R. § 1.17(a)(1) for the one-month extension of time to file this response. Should the Commissioner deem that any additional fees are due, including any fees for extensions of time, the Commissioner is authorized to debit Baker Botts L.L.P. Deposit Account No. 02-0383, Order Number 063718.0187, for any underpayment of fees that may be due in association with this filing.

Respectfully submitted,



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